(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
4 March 2004 (04.03.2004)

PCT

(10) International Publication Number
WO 2004/018955 A1

(51) International Patent Classification[7]: F28F 25/10

(21) International Application Number:
PCT/AU2003/001083

(22) International Filing Date: 26 August 2003 (26.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2002951017 26 August 2002 (26.08.2002) AU

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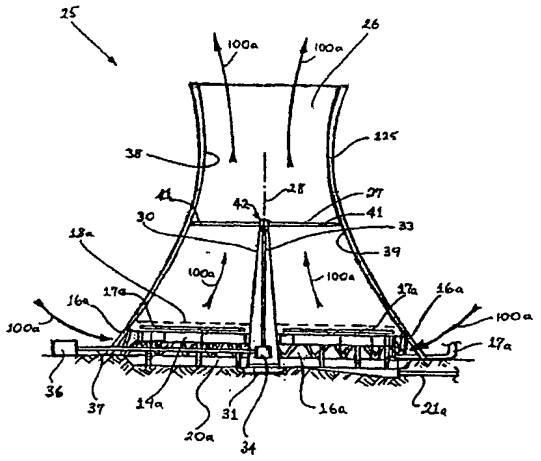
(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**
— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: PERFORMANCE AUGMENTATION OF NATURAL DRAFT COOLING TOWERS




(57) Abstract: A method and apparatus are provided for enhancing the performance capability of an existing natural draft cooling tower (13). The cooling tower includes a structure (14) defining an open-topped internal passage (15) of circular cross section for the upward flow of air from one or more inlets (16) at the base of the structure. The method includes steps of providing within the passage (15), an impeller (27) adapted when rotated at a specified speed about an upright axis of rotation (28) centrally located in the passage to increase the overall flow rate of air in the passage beyond the overall flow rate obtainable in the same operating conditions by natural draft alone and provides support means for said impeller and drive means capable of rotating the impeller at the specified speed. The impeller (27) is supported by the support means above heat transfer means (19) (which may be a wetted packing structure) of the cooling tower (13).

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